attached page is captioned "Version with markings to show changes made."

The 35 U.S.C. §112 Rejection

Claim 5 was rejected under 35 U.S.C. §112, first paragraph, for lack of enablement. The rejection is moot because claim 5 has been cancelled.

Claims 1, 4 and 10 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicants respectfully traverse this rejection.

Claims 1, 4 and 10 were rejected for reciting "pharmacologically effective dose". The claims have been amended to delete the phrase. Accordingly, Applicants respectfully request that the rejection of claims 1, 4 and 10 under 35 U.S.C. §112, second paragraph, be withdrawn.

The 35 U.S.C. §102 Rejection

Claims 1, 4 and 5 were rejected under 35 U.S.C. §102(b) as being anticipated by **Fuks** et al. The rejection is respectfully traversed.

Fuks et al. disclosed a method of inhibiting radiation-induced programmed cell death *in vitro* and *in vivo* by administering basic fibroblast growth factor. In contrast, claim 1 is drawn to a method of inhibiting the generation of ceramide from sphingomyelin by basic fibroblast growth factor. Claim 4 is drawn to a method of using basic fibroblast growth factor to treat endotoxic shock. **Fuks** et al. did not teach or suggest using basic fibroblast growth factor to inhibit the generation of ceramide from sphingomyelin, nor did **Fuks** et al. teach or suggest using basic fibroblast growth factor to treat endotoxic shock as claimed herein.

The Examiner argued that administration of basic fibroblast growth factor would inherently lead to inhibition of ceramide generation from sphingomyelin. Applicants respectfully disagree. **Fuks** et al. did not teach or suggest administration of basic fibroblast growth factor would inherently lead to inhibition of ceramide generation from sphingomyelin. In contrast, **Fuks** et al. teach and suggest basic fibroblast growth factor activates membrane protein kinase C, not inhibition of ceramide generation from sphingomyelin, as a mechanism for resistance to radiation damage and apoptosis (page 2588, column 2). **Fuks** et al. did not teach or

suggest basic fibroblast growth factor would inhibit ceramide generation from sphingomyelin as claimed herein.

Since **Fuks** et al. does not teach or suggest each and every aspect of the instant invention, **Fuks** et al. does not anticipate claims 1 and 4 of the instant application. Accordingly, Applicants respectfully request that the rejection of claims 1, 4 and 5 under 35 U.S.C. §102(b) be withdrawn.

This is intended to be a complete response to the Office Action mailed February 27, 2002. If any issues remain outstanding, the Examiner is requested to telephone the undersigned attorney of record for immediate resolution.

Respectfully submitted,

Date: April 5, 2002

Benjamin Aaron Adler, Ph.D., J.D.
Registration No. 35,423
Counsel for Applicant

ADLER & ASSOCIATES
8011 Candle Lane
Houston, Texas 77071
(713) 270-5391
BADLER1@houston.rr.com

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claim 1 has been amended as follows:

1. (amended) A method of inhibiting the generation of ceramide from sphingomyelin comprising the step of administering ~~a pharmacologically effective dose of~~ basic fibroblast growth factor to an animal in need of such treatment.

Claim 4 has been amended as follows:

4 (thrice ~~twice~~amended) A method of treating endotoxic shock ~~a pathophysiological state~~ in an animal, ~~wherein in said pathophysiological state an increase in generation of ceramide from sphingomyelin induces endothelial apoptosis in said animal,~~ comprising the step of administering ~~a pharmacologically effective dose of a~~ basic fibroblast growth factor to said animal, wherein said fibroblast growth factor prevents endothelial apoptosis resulting from endotoxic shock by inhibiting the generation of ceramide from sphingomyelin.

Claim 10 has been amended as follows:

10. (twice amended) A method of treating an individual at risk for sepsis, comprising the step of administering ~~a pharmacologically effective dose of a~~ basic fibroblast growth factor to said individual, wherein said fibroblast growth factor prevents endothelial apoptosis resulting from sepsis by inhibiting the ~~to inhibit~~ generation of ceramide from sphingomyelin ~~to prevent endothelial apoptosis resulting from sepsis~~.